WHAT IS CLAIMED IS:

- 1. An integrated graphic rendering system, wherein the system is connected to one or more users via a network, wherein each of the users has a console and an SGD production tool, the system comprising:
 - a) one or more SGD handling agent, wherein each of the SGD handling agents is installed in the console, selectively extracts SGD from the SGD produced by the SGD production tool, transforms the extracted SGD into a predetermined format, compresses the transformed SGD, and outputs the compressed SGD to the network;
 - b) an integrated rendering management server,
 wherein the integrated rendering management
 server has a 1:N signal connection with the SGD
 handling agents via the network, collects the SGD
 that are output from the SGD handling agents, and
 decompresses the collected SGD; and
 - c) a plurality of rendering execution tools, wherein the rendering execution tools have parallel signal connections with the integrated rendering management server;

wherein the integrated rendering management server sends distributed rendering commands to the rendering

execution tools, monitors rendering execution status of the rendering execution tools, and checks rendering errors;

wherein each of the rendering execution tools performs distributed rendering of the SGD under control of the integrated rendering management server, creates rendered data, and outputs the rendered data to the integrated rendering management server; and wherein the integrated rendering management server collects and stores the rendered data.

- 2. The system of claim 1 wherein each of the SGD handling agents comprises:
 - a) a selective SGD extraction module that selects and extracts SGD that are essential for rendering process from the entire SGD that are produced by the SGD production tool;
 - b) an SGD transformation module that transforms the SGD into a predetermined format; and
 - c) a compression management module that compresses the SGD.
- 3. The system of claim 2 wherein each of the SGD handling agents further comprises:

- a) a communication security module that encrypts the SGD; and
- b) a communication module that sends the SGD to the integrated rendering management server.
- 4. The system of claim 2 wherein the selective SGD extraction module comprises:
 - a) an SGD opening section that selectively opens the SGD produced by the SGD production tool;
 - b) an SGD analysis section that analyzes the SGD, and selectively extracts a predetermined key information;
 - c) an SGD parameter check section that checks the consistency of the key information;
 - an SGD extraction list generation section that selects SGD related to the key information among the entire SGD according to the check result of the SGD parameter check section, and creates an SGD extraction list based on the SGD selected to be extracted;
 - e) an SGD extraction section that extracts the selected SGD based on the SGD extraction list; and

- f) an SGD transmission list generation section that creates an SGD transmission list for SGD, which are required to be transmitted, based on the SGD extracted by the SGD extraction section.
- 5. The system of claim 4 wherein the selective SGD extraction module further comprises an SGD extraction management section that communicates with the SGD handling controller, and controls the SGD opening section, the SGD analysis section, the SGD parameter check section, the SGD extraction list generation section, the SGD extraction section, and the SGD transmission list generation section.
- 6. The system of claim 1 wherein the integrated rendering management server comprises:
 - a) a compression management module that manages compression and decompression of the SGD;
 - b) a rendering operation command management module that has a signal connection with each of the rendering execution tools, and selectively commands the rendering operation of the SGD according to the individual operation status of the tool; and

- c) a rendered data check module that checks the integrity of rendered data that were output from the rendering execution tools.
- 7. The system of claim 6 wherein the integrated rendering management server further comprises:
 - a) a communication security module that manages the security of the SGD by performing encrypting and decrypting SGD;
 - b) a communication state check module that checks the network operation status for the rendering execution tools and promptly reports any abnormality in the network operation status;
 - c) a rendering error data check module that checks rendering error messages, and rendering warning messages that are sent by the rendering execution tools, and reports the results of the messages;
 - d) a rendered data storage management module that receives, stores and manages the rendered data;
 - e) an operation management module that selectively extracts operation information; and
 - f) an accounting management module that monitors rendering cost occurrence for each user, and stores accounting data.

- 8. The system of claim 7 wherein the integrated rendering management server further comprises an integrated rendering management module that collects the SGD transmitted from the SGD handling agents, manages procedures for distributed rendering of the SGD, and controls the compression management module, the rendering operation command management module, the rendered data check module, the communication security module, the communication state check module, the rendered data storage management module, the operation management module, and the accounting management module.
- 9. The system of claim 7 wherein the rendering execution tool comprises:
 - a) a rendering management module that has a signal connection with the integrated rendering management server, and manages the rendering processes;
 - b) a rendering execution engine that performs rendering routines to render the SGD thereby creating the rendered data;
 - c) a data format transformation module that receives the rendered data that are output from the

rendering execution engine, and transforms the format of the rendered data to a predetermined format;

- d) an operation tracking module that has a signal connection with the rendering error data check module of the integrated rendering management server, and tracks and manages the rendering status of each of the rendering execution engines; and
- e) a transmission status check module that has a signal connection with the communication state check module of the integrated rendering management server, and checks the status of the network.
- 10. The system of claim 1 wherein the rendering execution tool comprises:
 - a) a rendering management module that has a signal connection with the integrated rendering management server, manages the rendering processes;
 - b) a rendering execution engine that performs rendering routines to render the SGD thereby creating the rendered data; and

c) a data format transformation module that receives the rendered data that are output from the rendering execution engine, and transforms the format of the rendered data to a predetermined format;

wherein the rendering management module controls the rendering execution engine, and the data format transformation module.

- 11. A method for integrated graphic rendering, wherein one or more user consoles having SGD production tools are connected to an integrated rendering management server, wherein a plurality of rendering execution tools are connected to the integrated rendering management server, the method comprising:
 - i) a console-side rendering target data handling process; and
 - ii) a server-side rendering target data handling
 process;

wherein the console-side rendering target data handling process comprises:

a) deciding whether an SGD rendering order event has been occurred;

- b) selectively opening SGD that were produced by the SGD production tool when it is decided that an SGD rendering order event has occurred;
- c) analyzing the opened SGD and extracting predetermined key information;
- d) checking the consistency of the key information;
- e) selecting SGD that are to be extracted according to the key information when it is decided that the key information is consistent;
- f) creating an SGD extraction list that incorporates the particulars of the selected SGD;
- g) selectively extracting SGD based on the SGD extraction list; and
- h) transmitting the SGD to the integrated rendering management server.
- 12. The method of claim 11 wherein the console-side rendering target data handling process further comprises between the step of selectively extracting SGD and the step of transmitting the SGD:
 - a) checking client-side rendering options;
 - b) creating an SGD transmission list based on the extracted SGD and the client-side options;
 - c) transforming the SGD into a predetermined format;

- d) compressing the SGD; and
- e) encrypting the SGD.
- 13. The method of claim 12 wherein the server-side rendering target data handling process comprises:
 - a) deciding whether an event of SGD input has been occurred;
 - b) decrypting and decompressing the SGD;
 - c) authenticating of the user;
 - d) selectively sending commands to the rendering execution tools according to the operation status of the individual rendering execution tools;
 - e) checking the operation status of the rendering execution tools and deciding whether rendered data have been output from the rendering execution tools;
 - f) checking the integrity of the rendered data, and deciding whether there is a rendering error;
 - g) storing the rendered data;
 - h) compressing and encrypting the rendered data; and
 - i) transmitting the rendered data.
- 14. The method of claim 11 wherein the server-side rendering target data handling process comprises:

- a) deciding whether an event of SGD input has been occurred;
- b) selectively sending commands to the rendering execution tools according to the operation status of the individual rendering execution tools;
- c) checking the operation status of the rendering execution tools and deciding whether rendered data have been output from the rendering execution tools; and
- d) checking the integrity of the rendered data, and deciding whether there is a rendering error.
- 15. The method of claim 14 wherein the server-side rendering target data handling process further comprises between the step of deciding whether an event of SGD input has been occurred and the step of selectively sending commands to the rendering execution tools:
 - a) decrypting and decompressing the SGD; and
 - b) authenticating of the user.
- 16. The method of claim 15 wherein the server-side rendering target data handling process further

comprises after the step of checking the integrity of the rendered data:

- a) storing the rendered data;
- b) compressing and encrypting the rendered data; and
- c) transmitting the rendered data.